29

deriving a first temporal transfer characteristic for said first modified version of said first modulated optical signal; receiving a second modified version of said second modulated optical signal after transmitting to said human tis-

deriving a second temporal transfer characteristic for said second modified version of said second modulated optical signal;

delaying said first code sequence to generate a third code sequence;

generating a third digital modulation signal associated with said third code sequence;

generating a third modulated optical signal of a second wavelength based on said third digital modulation signal:

transmitting said third modulated optical signal of said second wavelength to said human tissue;

receiving a third modified version of said third modulated optical signal after transmitting to said human tissue;

deriving a third temporal transfer characteristic for said third modified version of said third modulated optical signal;

detecting said pressure sores based on said first, second and third temporal transfer characteristic; and

30

adjusting frequency of a blinking indicator based upon detection of said pressure sores.

12. The method of claim 11 further comprising: delaying said first modulated optical signal to reduce noise effects.

13. The method of claim 11 further comprising: determining an absorption coefficient of said human tissue; and

determining scattering characteristics of said human tis-

14. The method of claim 11 further comprising: calculating oxygen level in said human tissue.

15. The method of claim 11 further comprising: determining hemoglobin concentration of said human tissue

16. The method of claim 11 further comprising: determining water content of said human tissue.

 ${\bf 17}.$  The method of claim  ${\bf 11}$  wherein said code sequence is  $_{20}$  orthogonal.

**18**. The method of claim **11** further comprising: generating a multidimensional image.

\* \* \* \* \*